

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

print: 24.01.2025

rev n°: 2 (replaces version 1)

Revision date: 24.01.2025

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: BISMARK

Article number: not applicable

Registration number REACH Not applicable.

UFI: YMSH-Y0VQ-YC0U-94VP

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant use: Agriculture.

Herbicide

Agrochemicals formulation.

Product category PC27 Plant protection products

Application of the substance / the mixture

Plant protection product

Agricultural chemicals

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

SIPCAM OXON S.p.A.

Registered office: Via Carroccio, 8 - 20123 Milano, Italia

Management: Via Sempione, 195 - 20016 Pero (MI), Italia

Production site: Via Vittorio Veneto, 81 - 26857 Salerano s. Lambro (LO), Italia

Tel.: +39 0371 5961 (8:00 - 17:00 GMT+1)

Website: www.sipcam-oxon.com

E-mail: msds@sipcam.com

1.4 Emergency telephone number:

Emergency phone: +39 02 353781 (8.00-17.00 GMT+1)

For any questions regarding this MSDS please contact:

msds@sipcam.com

Refer to section 16 for Poison Centres.

CENTRE ANTIPOISONS BELGE/BELGISCH ANTIGIFCENTRUM/BELGISCHE GIFTNOTRUFZENTRALE

+32 070 245 245

<https://www.centreatipoisons.be/>

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008



GHS08 health hazard

Repr. 2 H361d Suspected of damaging the unborn child.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05



GHS08



GHS09

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Signal word Danger**Hazard-determining components of labelling:**

Calcium Ammonium Nitrate

pendimethalin (ISO)

Hazard statements

H318 Causes serious eye damage.

H361d Suspected of damaging the unborn child.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P263 Avoid contact during pregnancy and while nursing.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P391 Collect spillage.

Additional information:

SP1 Do not contaminate water with the product or its container.

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

2.3 Other hazards**Results of PBT and vPvB assessment****PBT:** The mixture does not contain any PBT substances.**vPvB:** The mixture does not contain any vPvB substances.**Determination of endocrine-disrupting properties**

The substance/mixture does not contain components considered to have endocrine disrupting properties in accordance with Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients**3.2 Mixtures****Description:** Mixture of the substances listed below with harmless additions:**Dangerous components:**

| N° CAS | Designation | R-Phrases | % |
|---|--|---|---------|
| CAS: 40487-42-1 EINECS: 254-938-2 Index number: 609-042-00-X | pendimethalin (ISO) | ⚠ Repr. 2, H361d; ⚠ Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=10) | 25-50% |
| CAS: 15245-12-2 EINECS: 239-289-5 Reg.nr.: 01-2119493947-16 | Calcium Ammonium Nitrate | ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302 | ≥3-≤10% |
| CAS: 81777-89-1 EC number: 617-258-0 Index number: 613-340-00-5 | Clomazone | ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332 ATE: LD50 oral: 768 mg/kg LC50 (4 h) inhalative: 4.85 mg/L | 2.5-10% |
| CAS: 64742-94-5 EC number: 922-153-0 Reg.nr.: 01-2119451097-39-xxxx | Aromatic hydrocarbons C10-C13, naphtalene <1% | ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411 | 2.5-10% |
| CAS: 68512-34-5 EC number: 614-547-3 | Lignosulfonic acid, sodium salt, sulfomethylated | ⚠ Eye Irrit. 2, H319 | <2.5% |
| CAS: 2634-33-5 EINECS: 220-120-9 Index number: 613-088-00-6 Reg.nr.: 01-2120761540-60-xxxx | 1,2-benzisothiazol-3(2H)-one | ⚠ Acute Tox. 2, H330; ⚠ Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1A, H317 ATE: LD50 oral: 450 mg/kg Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.036 % | <0.025% |

Additional information

Factor M=1, unless otherwise stated.

For the wording of the listed hazard phrases refer to section 16.

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SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Instantly remove any clothing soiled by the product.

Personal protection for the First Aider.

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness bring patient into stable side position for transport.

After skin contact Instantly wash with water and soap and rinse thoroughly.

After eye contact Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing

Call a doctor immediately.

Rinse out mouth without swallowing, do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

Seek the advice of a Poison Control Centre

Treat symptomatically and supportively

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents

CO₂, extinguishing powder. Fight larger fires with water spray or alcohol-resistant foam. Do not use a direct stream of water to extinguish.

Use fire fighting measures that suit the environment.

For safety reasons unsuitable extinguishing agents

Avoid full water jet.

None.

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

Nitrogen oxides (NO_x)

Carbon monoxide (CO)

5.3 Advice for firefighters

Protective equipment:

Do not inhale explosion gases or combustion gases.

Wear protective clothing conforming to European Standard EN 469.

Additional information

Cool endangered containers with water spray jet.

Collect contaminated fire fighting water separately. It must not enter drains.

Do not allow extinguishing media and spilled material to enter drains or water courses.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from ignition sources

Wear protective equipment. In case of inadequate ventilation, wear protective mask (brown filter). Keep unprotected persons away.

Keep people at a distance and stay on the windward side.

Wear protective clothing.

6.1.1. For non-emergency personnel

wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing;

remove ignition sources, provide sufficient ventilation, control dust;

apply emergency procedures, evacuate the danger area or consult an expert.

6.1.2. For emergency responders

wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing;

In case of dust provide inhalation protection

Wear protective clothing, boots and glasses

6.2 Environmental precautions:

Inform respective authorities in case product reaches water or sewage system.

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Do not allow to enter drainage system, surface or ground water.
 Prevent from spreading (e.g. by damming-in or oil barriers).
 Collect with suitable equipment and do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose of contaminated material as waste according to Section 13.

6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Avoid splashes or spray in enclosed areas.

Wear personal protective equipments (PPE).

The usual precautionary measures for handling chemicals shall be observed.

Information about protection against explosions and fires:

The product is not flammable

Keep ignition sources away - Do not smoke.

Handling

Avoid contact with the skin and vapour inhalation; do not eat, drink nor smoke while working.

Avoid direct or indirect contact with the product. Do not eat, drink or smoke while working.

7.2 Conditions for safe storage, including any incompatibilities**Storage**

Store in a cool and ventilated place, away from heat source and direct sunlight without open sewage system.

Keep out the reach of children, unauthorized persons and animals. Keep away from food, drink and animal feedingstuffs.

Requirements to be met by storerooms and containers: Store only in the original container.

Information about storage in one common storage facility:

Prevent storage with incompatible materials (see chapter 10).

Store away from foodstuffs.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

Storage class 12**7.3 Specific end use(s)**

Agriculture

To be applied strictly for the uses described in the label.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters**Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

DNELs**CAS: 15245-12-2 Calcium Ammonium Nitrate**

| | | |
|------|-----------------|---|
| Oral | DNEL Short-term | 10 mg/kg bw/day (consumers) Systemic effects |
|------|-----------------|---|

CAS: 64742-94-5 Aromatic hydrocarbons C10-C13, naphtalene <1%

| | | |
|--------|----------------|--|
| Oral | DNEL Long-term | 7.5 mg/kg bw/day (consumers) systemic effects |
| Dermal | DNEL Long-term | 12.5 mg/kg bw/day (workers) systemic effects |
| | | 7.5 mg/kg bw/day (consumers) systemic effects |

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| | | |
|------------|----------------|---|
| Inhalative | DNEL Long-term | 151 mg/m ³ (workers) systemic effects 32 mg/m ³ (consumers) systemic effects |
|------------|----------------|---|

PNECs**CAS: 15245-12-2 Calcium Ammonium Nitrate**

PNEC 18 mg/L (sewage treatment plant)

Additional information: The lists that were valid during the compilation were used as basis.**8.2 Exposure controls****Appropriate engineering controls** Eye wash stations shall be available in the work area.**Individual protection measures, such as personal protective equipment****General protective and hygienic measures**

The usual precautionary measures for handling chemicals shall be observed.

Keep away from foodstuffs, beverages and food.

Take off immediately all contaminated clothing

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Pregnant women must strictly avoid inhalation or contact with the skin.

Do not eat, drink or smoke while working.

Breathing equipment:

Breathing protection recommended in accordance with the relevant European Standards.

Hand protection

Protective gloves (rubber or plastic).



Protective gloves against chemicals and micro-organisms in accordance with EN 374

Material of gloves Nitrile rubber, NBR**Eye/face protection**

Tightly sealed safety glasses in accordance with EN 166.

Body protection: Protective work clothing.**Boots** Safety footwear for professional use in accordance with EN 345.**Environmental exposure controls**

Waste waters from equipment cleaning shall be disposed according to local and national regulation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties**General Information****Physical state**

Liquid

Colour:

Dark orange

Odour:

Aromatic

Melting point/freezing point:

Not applicable

Boiling point or initial boiling point and boiling range

Not determined

Flammability

Not applicable because the product is liquid

Lower and upper explosion limit**Lower:**

Not explosive

Method EU A.14

Upper:

Not determined.

Method EU A.14

Flash point:

no flash point up to 140 °C.

Auto-ignition temperature:

292.55±9.83 °C (EU A.15)

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| | |
|--|---|
| Decomposition temperature: | Not determined. |
| pH at 20 °C | 6.56 (CIPAC MT 75.3) |
| pH value | |
| (1% in distilled water) at 20 °C | 7.84 (CIPAC MT 75.3) |
| pH (undiluted sample) | |
| Viscosity: | |
| Kinematic viscosity | 258.41 mm ² /s (Calculated) |
| dynamic at 20 °C: | 350.7 - 530.7 cPs (20 - 50 rpm; OECD 114) |
| Solubility | |
| Water: | Dispersible |
| Partition coefficient n-octanol/water (log value) | Not determined. |
| Vapour pressure: | Not determined. |
| Density and/or relative density | |
| Relative density at 20 °C | 1.13 g/ml (OECD 109; EU A.3) |
| Vapour density | Not determined. |

9.2 Other information**Appearance:****Form:** Liquid**Important information on protection of health and environment, and on safety.****Self-inflammability:** Product is not selfigniting.
Method EU A.15**Explosive properties:** Product is not explosive.
Method EU A.14**Change in condition****Softening point/range****Oxidising properties**

Not an oxidiser

According to theoretical considerations based on chemical structure, the product does not possess explosive properties

Evaporation rate

Not determined.

Information with regard to physical hazard classes**Explosives**

The product is not explosive. Method EU A.14

Flammable gases

Void

Aerosols

Void

Oxidising gases

Void

Gases under pressure

Void

Flammable liquids

The product is not flammable as it does not contain flammable solvents.

Flammable solids

Void

Self-reactive substances and mixtures

Void

Pyrophoric liquids

Product is not autoflammable. Method EU A.15

Pyrophoric solids

Void

Self-heating substances and mixtures

Void

Substances and mixtures, which emit flammable gases in contact with water

Void

Oxidising liquids

The product is non-oxidising as it contains no oxidising solvents

Oxidising solids

Void

Organic peroxides

Void

Corrosive to metals

Void

Desensitised explosives

Void

SECTION 10: Stability and reactivity

10.1 Reactivity The product is not reactive under recommended handling conditions.**10.2 Chemical stability** Stable under the recommended handling and storage conditions (see section 7).**Thermal decomposition / conditions to be avoided:** No decomposition if used and stored according to specifications.**10.3 Possibility of hazardous reactions** No dangerous reactions are known.**10.4 Conditions to avoid** No further relevant information available.**10.5 Incompatible materials:** No further relevant information available.

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10.6 Hazardous decomposition products: None in standard storage conditions.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values that are relevant for classification:

| | | |
|------------|------------|-------------------------------|
| Oral | LD50 | >2,000 mg/kg (rat) (OECD 423) |
| Dermal | LD50 | >2,000 mg/kg (rat) (OECD 402) |
| Inhalative | LC50 (4 h) | >1.1 mg/L (rat) (OECD 403) |

CAS: 40487-42-1 pendimethalin (ISO)

| | | |
|--------|------|-------------------------------|
| Oral | LD50 | 4,665 mg/kg (rat) (OECD 401) |
| Dermal | LD50 | >5,000 mg/kg (rat) (OECD 402) |

CAS: 15245-12-2 Calcium Ammonium Nitrate

| | | |
|--------|------|------------------------------------|
| Oral | LD50 | 500 mg/kg (rat) (OECD 423) |
| Dermal | LD50 | 2,000-5,000 mg/kg (rat) (OECD 402) |

CAS: 81777-89-1 Clomazone

| | | |
|------------|------------|-----------------------|
| Oral | LD50 | 768 mg/kg (ATE) |
| Dermal | LD50 | >2,000 mg/kg (rabbit) |
| Inhalative | LC50 (4 h) | 4.85 mg/L (ATE) |

CAS: 64742-94-5 Aromatic hydrocarbons C10-C13, naphtalene <1%

| | | |
|------------|------------|-------------------------------------|
| Oral | LD50 | 6,318 mg/kg (rat) (OECD 401) |
| | | 5,558 mg/kg (rat female) (OECD 401) |
| | | 7,093 mg/kg (rat male) (OECD 401) |
| Dermal | LD50 | >2,000 mg/kg (rabbit) |
| Inhalative | LC50 (4 h) | >4,688 mg/L (rat) (OECD 403) |

CAS: 68512-34-5 Lignosulfonic acid, sodium salt, sulfomethylated

| | | |
|------------|------------|---------------------|
| Oral | LD50 | <10,000 mg/kg (rat) |
| Inhalative | LC50 (4 h) | >480 mg/L (rat) |

Dimethylpolysiloxane

| | | |
|------|------|--------------------|
| Oral | LD50 | >2,000 mg/kg (rat) |
|------|------|--------------------|

Primary irritant effect:

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Skin corrosion / irritation - Test

| | | |
|--------------------|----------------|---------------------|
| Irritation of skin | Skin corrosion | (rabbit) (OECD 404) |
|--------------------|----------------|---------------------|

CAS: 40487-42-1 pendimethalin (ISO)

| | | |
|--------------------|----------------|-------------------------------------|
| Irritation of skin | Skin corrosion | (rabbit) (OECD 404) not irritant |
|--------------------|----------------|-------------------------------------|

CAS: 81777-89-1 Clomazone

| | | |
|--------------------|----------------|--------------------------|
| Irritation of skin | Skin corrosion | (rabbit) Not irritant |
|--------------------|----------------|--------------------------|

CAS: 64742-94-5 Aromatic hydrocarbons C10-C13, naphtalene <1%

| | | |
|--------------------|----------------|---------------------------------------|
| Irritation of skin | Skin corrosion | (rabbit) (OECD 404) Not irritating |
|--------------------|----------------|---------------------------------------|

CAS: 68512-34-5 Lignosulfonic acid, sodium salt, sulfomethylated

| | | |
|--------------------|----------------|--------------------------|
| Irritation of skin | Skin corrosion | (rabbit) Not irritant |
|--------------------|----------------|--------------------------|

Dimethylpolysiloxane

| | | |
|--------------------|----------------|--|
| Irritation of skin | Skin corrosion | (rabbit) repeated and prolonged contact may cause mild irritation |
|--------------------|----------------|--|

Serious eye damage/irritation Causes serious eye damage.

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Serious eye damage / Irritation - Test**CAS: 40487-42-1 pendimethalin (ISO)**

| | | |
|--------------------|----------------|-------------------------------------|
| Irritation of eyes | Eye Irritation | (rabbit) (OECD 405) not irritant |
|--------------------|----------------|-------------------------------------|

CAS: 81777-89-1 Clomazone

| | | |
|--------------------|----------------|--------------------------|
| Irritation of eyes | Eye Irritation | (rabbit) Not irritant |
|--------------------|----------------|--------------------------|

CAS: 64742-94-5 Aromatic hydrocarbons C10-C13, naphtalene <1%

| | | |
|--------------------|----------------|---------------------------------------|
| Irritation of eyes | Eye Irritation | (rabbit) (OECD 405) Not irritating |
|--------------------|----------------|---------------------------------------|

CAS: 68512-34-5 Lignosulfonic acid, sodium salt, sulfomethylated

| | | |
|--------------------|----------------|----------------------|
| Irritation of eyes | Eye Irritation | (rabbit) Irritant |
|--------------------|----------------|----------------------|

Dimethylpolysiloxane

| | | |
|--------------------|----------------|--|
| Irritation of eyes | Eye Irritation | (rabbit) causes serious eye damages |
|--------------------|----------------|--|

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.**Sensitisation - Test**

| | |
|---------------|---|
| Sensitization | (mice) (OECD 429 Mouse Local lymphnode assay) |
|---------------|---|

CAS: 64742-94-5 Aromatic hydrocarbons C10-C13, naphtalene <1%

| | |
|---------------|--|
| Sensitization | (guinea pig) (OECD 406) Not sensitizing |
|---------------|--|

CAS: 68512-34-5 Lignosulfonic acid, sodium salt, sulfomethylated

| | |
|---------------|---------------------------------|
| Sensitization | (guinea pig) Not sensitizing |
|---------------|---------------------------------|

Dimethylpolysiloxane

| | |
|---------------|--|
| Sensitization | (guinea pig) Not sensitizing - referred to one component of the mixture |
|---------------|--|

Germ cell mutagenicity Based on available data, the classification criteria are not met.**Carcinogenicity** Based on available data, the classification criteria are not met.**Reproductive toxicity** Suspected of damaging the unborn child.**STOT-single exposure** Based on available data, the classification criteria are not met.**STOT-repeated exposure** Based on available data, the classification criteria are not met.**Aspiration hazard** Based on available data, the classification criteria are not met.**Other information:** For symptoms and effects see section 4.**Additional toxicological information:****Acute effects (acute toxicity, irritation and corrosivity)** No further information available.**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

The product is classified as suspected reprotoxic

11.2 Information on other hazards**Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information**12.1 Toxicity** Very toxic to aquatic life with long lasting effects.**Aquatic toxicity:**

| | |
|-------------|---|
| LC50 (96h) | >100 mg/L (rainbow trout (<i>oncorhynchus mykiss</i>)) |
| EC50 (48h) | >100 mg/L (<i>Daphnia magna</i>) |
| ErC50 (72h) | 2.82 mg/L (algae <i>Pseudokirchneriella subcapitata</i>) |
| EC50 (7d) | >100 mcg/L (<i>Lemna minor</i>) |
| EC10 | 0.5 mg/L (<i>Daphnia magna</i>) |

CAS: 40487-42-1 pendimethalin (ISO)

| | |
|------------|--|
| EC50 (72h) | 0.0337 mg/L (algae <i>selenastrum capricornutum</i>) |
| LC50 (96h) | 0.89 mg/L (rainbow trout (<i>oncorhynchus mykiss</i>)) |

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| | |
|--|--|
| EC50 (48h) | 0.4 mg/L (<i>Daphnia magna</i>) |
| EC50 | 0.005 mg/L (algae) (5 d - <i>Skeletonema costatum</i>) |
| NOEC | 0.0145 mg/L (<i>Daphnia magna</i>) (21 d) |
| | 0.05 mg/L (rainbow trout (<i>oncorhynchus mykiss</i>)) (21 d) |
| CAS: 15245-12-2 Calcium Ammonium Nitrate | |
| EC50 (72h) | >100 mg/L (algae <i>Pseudokirchneriella subcapitata</i>) (OECD 201) |
| EC50 (48h) | >100 mg/L (<i>Daphnia magna</i>) |
| LC 50 | 447 mg/L (<i>Cyprinus carpio</i>) (48 h) |
| CAS: 81777-89-1 Clomazone | |
| LC50 (96h) | 15.5 mg/L (rainbow trout (<i>oncorhynchus mykiss</i>)) |
| EC50 (48h) | 12.7 mg/L (<i>Daphnia magna</i>) |
| EC50 | >185 mg/L (algae) (<i>Navicula pelliculosa</i> - 120 h - ErC50) |
| | >34 mg/L (<i>lemna gibba</i>) (14 d - ErC50) |
| CAS: 64742-94-5 Aromatic hydrocarbons C10-C13, naphthalene <1% | |
| LC50 (96h) | 0.46 mg/L (rainbow trout (<i>oncorhynchus mykiss</i>)) (EPA OPP 72-1 (Fish Acute Toxicity Test)) |
| | LL50 = 3.6 mg/l |
| EC50 (48h) | 0.471 mg/L (<i>Tetrahymena pyriformis</i>) |
| | 1.1 mg/L (<i>Daphnia magna</i>) (EPA OPP 72-2 (Aquatic Invertebrate Acute Tox. Test)) |
| EbC50 (72h) | 0.29 mg/L (algae <i>Pseudokirchneriella subcapitata</i>) |
| ErC50 (72h) | 0.42 mg/L (algae <i>Pseudokirchneriella subcapitata</i>) |
| CAS: 68512-34-5 Lignosulfonic acid, sodium salt, sulfomethylated | |
| LC50 (96h) | 615 mg/L (<i>pimephales promelas</i>) |
| EC50 (48h) | 5.4 mg/L (<i>Crassostrea gigas</i>) |
| Dimethylpolysiloxane | |
| LC50 (96h) | >100 mg/L (fish) |
| | referred to one component of the mixture |
| | 420 mg/L (rainbow trout (<i>oncorhynchus mykiss</i>)) |

Environmental toxicity**CAS: 40487-42-1 pendimethalin (ISO)**

| | | |
|------|-------|--|
| Oral | LD 50 | 1,421 mg/kg bw (<i>Anas platyrhynchos</i>) |
| | LD 50 | 49.8 µg/bee (bee (<i>Apis mellifera</i>)) |

CAS: 81777-89-1 Clomazone

| | | |
|--------|-------|---|
| Oral | EC 50 | 2,510 mg/kg (<i>Colinus virginianus</i>) |
| | LD 50 | >85.29 µg/bee (bee (<i>Apis mellifera</i>)) |
| Dermal | LD 50 | >100 µg/bee (bee (<i>Apis mellifera</i>)) |

12.2 Persistence and degradability**CAS: 64742-94-5 Aromatic hydrocarbons C10-C13, naphthalene <1%**

| | |
|----------------|-----------------------|
| Biodegradation | 70 % (28 d OECD 301F) |
|----------------|-----------------------|

12.3 Bioaccumulative potential**CAS: 40487-42-1 pendimethalin (ISO)**

| | |
|---------------------------------------|-------|
| Octanol / Water partition coefficient | 5.18 |
| BCF - Bioconcentration factor | 5,100 |

CAS: 81777-89-1 Clomazone

| | |
|---------------------------------------|---|
| Octanol / Water partition coefficient | 2.54 (partition n-octanol/water) (23°C) |
|---------------------------------------|---|

CAS: 68512-34-5 Lignosulfonic acid, sodium salt, sulfomethylated

| | |
|---------------------------------------|-------|
| Octanol / Water partition coefficient | ≤3.45 |
|---------------------------------------|-------|

12.4 Mobility in soil No further relevant information available.**12.5 Results of PBT and vPvB assessment****PBT:** None of the ingredients meets the classification requirements.**vPvB:** None of the ingredients meets the classification requirements.**12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.**12.7 Other adverse effects** No further relevant information available.**Remark:** Toxic for aquatic organisms.

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DT 50 (active ingredient)
CAS: 40487-42-1 pendimethalin (ISO)

DT 50 | 30-150 days (soil)

CAS: 81777-89-1 Clomazone

DT 50 | 89 days (soil)

moderate to persistent

52.5 days (water)

slow degradation

Additional ecological information:
General notes:

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even small quantities leak into soil.

Also poisonous for fish and plankton in water bodies.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings: Dispose empty packagings according to current regulations.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN, IMDG, IATA

UN3082

14.2 UN proper shipping name

ADR/RID/ADN

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (pendimethalin (ISO))

IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (pendimethalin (ISO)), MARINE POLLUTANT

IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (pendimethalin (ISO))

14.3 Transport hazard class(es)

ADR/RID/ADN



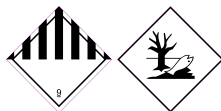
Class

9 (M6) Miscellaneous dangerous substances and articles.

Label

9

IMDG, IATA



Class

9 Miscellaneous dangerous substances and articles.

Label

9

14.4 Packing group

ADR/RID/ADN, IMDG, IATA

III

14.5 Environmental hazards:

Product contains environmentally hazardous substances: pendimethalin (ISO)

Marine pollutant:

Yes

Symbol (fish and tree)

Special marking (ADR/RID/ADN):

Symbol (fish and tree)

Special marking (IATA):

Symbol (fish and tree)

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| | |
|---|---|
| 14.6 Special precautions for user Kemler Number: EMS Number: Stowage Category | Warning: Miscellaneous dangerous substances and articles. 90 F-A,S-F A |
| 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| Transport/Additional information: | |
| ADR/RID/ADN Limited quantities (LQ) Excepted quantities (EQ) Transport category Tunnel restriction code Remarks: | 5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3 E Transport in Limited Quantities only in suitable packaging. ADR Special Provision 375 may apply for UN 3077 in packagings of 5 kg or less and for UN3082 in packagings of 5 L or less. |
| IMDG Limited quantities (LQ) Excepted quantities (EQ) Remarks: | 5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml IMDG Code 2.10.2.7 may apply for UN 3077 in packagings of 5 kg or less and for UN3082 in packagings of 5 L or less. |
| IATA Remarks: | For UN 3077 in packagings of 5 kg or less and UN3082 in packagings of 5 L or less, Special Provision A197 may apply according to IATA Dangerous Goods Regulation. |
| UN "Model Regulation": | UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PENDIMETHALIN (ISO)), 9, III |

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) n. 1907/2006
 Regulation (EC) n. 1272/2008
 Regulation (EC) n. 790/2009 and (EU) no. 758/2013
 Regulation (EU) n. 2020/878
 Regulation (EU) n. 286/2011
 Regulation (EU) n. 618/2012
 Regulation (EU) n. 487/2013
 Regulation (EU) n. 944/2013
 Regulation (EU) n. 605/2014
 Regulation (EU) n. 2015/1221
 Regulation (EU) n. 2016/918
 Regulation (EU) n. 2016/1179
 Regulation (EU) n. 2017/776
 Regulation (EU) n. 2018/669
 Regulation (EU) n. 2018/521
 Regulation (EU) n. 2018/1480
 Regulation (EU) n. 2020/217
 Regulation (EU) n. 2020/1182
 Regulation (EU) n. 1107/2009
 Regulation (EU) n. 2021/643
 Regulation (EU) n. 2021/849
 Regulation (EU) n. 2022/692
 Regulation (EU) n. 2023/1434
 Regulation (EU) n. 2022/1435
 Regulation (EU) n. 2024/197

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Directive 2012/18/EU**Named dangerous substances - ANNEX I** Not applicable**Seveso category E1** Hazardous to the Aquatic Environment**Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t**Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t**REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3**DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

REGULATION (EU) 2019/1148**Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

CAS: 15245-12-2 | Calcium Ammonium Nitrate

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/crisis-and-terrorism/explosives/explosives-precursors/docs/list_of_competent_authorities_and_national_contact_points_en.pdf.

Department issuing data specification sheet: Product safety department.

Contact:

Product safety department

SIPCAM OXON msds@sipcam.comFor Poison Centres in Europe see: <https://poisoncentres.echa.europa.eu>**Date of previous version:**

13.09.2023

13.09.2023

Version number of previous version: 1**Abbreviations and acronyms:**

EC 50: Effective concentration, 50 percent

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

ATE: Acute toxicity estimate values

Acute Tox. 4: Acute toxicity – Category 4

Acute Tox. 2: Acute toxicity – Category 2

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1A: Skin sensitisation – Category 1A

Repr. 2: Reproductive toxicity – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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Sources

Document elaborated on the basis of the data required by the EC Regulation 1107/2009 (plant protection products) and in accordance with the EC Regulation 878/2020.

*** Data compared to the previous version altered.**

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